

Claims 1-38 (cancelled)

Claim 39 (new): A method of forming a compressed wood product comprising the steps of:

subjecting a piece or pieces of softwood, with a moisture content of approximately 30-40% (w/w) to a first heating compression step in which the density of the softwood is increased to a first predetermined level and the moisture content is reduced to between approximately 3-8% (w/w),

releasing said wood from said first compression step, coating and impregnating said compressed wood with a fatty acid,

subjecting said impregnated compressed wood to a second heating compression step in which the density of said compressed wood is increased to a second predetermined level and the moisture content is further reduced and in which said fatty acid is further impregnated into said compressed wood, and

releasing said wood from said second compression step and allowing said impregnated compressed wood to anneal while cooling to ambient temperature.

Claim 40 (new): The method as claimed in claim 39, wherein said softwood is subjected to a preliminary drying step prior to said first compression step.

Claim 41 (new): The method as claimed in claim 39, wherein said first compression step is conducted at a pressure of from 50 to 114 kg/cm² according to wood species.

Claim 42 (new): The method as claimed in claim 39, wherein the temperature of said first compression step is within the range of 140°C to 185°C.

Claim 43 (new): The method as claimed in claim 39, wherein said softwood is subjected to a temperature of up to 200°C prior to said first compression step.

Claim 44 (new): The method as claimed in claim 39, wherein said compressed wood is impregnated by passing it through a heated bath only, or in combination with a vacuum pressure chamber.

Claim 45 (new): The method as claimed in claim 44, wherein said fatty acid is in a paraffin carrier.

Claim 46 (new): The method as claimed in claim 39, wherein said fatty acid is a member of the group consisting of stearic acid, palmitic acid and a combination thereof.

Claim 47 (new): The method as claimed in claim 39, wherein said second compression step is conducted at a temperature between 60°C and 140°C.

Claim 48 (new): The method as claimed in claim 39, wherein said wood is subjected to a preliminary drying step to reduce its moisture content before said first compression step.

Claim 49 (new): The method as claimed in claim 48, wherein said wood is subjected to an intermediate step of immersion in hot water or superheated steam between said preliminary drying step and said first compression step.

Claim 50 (new): The method as claimed in claim 39, wherein said

compressed wood from the said second compression step is subjected to further processing.

Claim 51 (new): A method of forming a compressed wood product comprising the steps of:

subjecting a piece or pieces of diffuse porous hardwood, with a moisture content of approximately 40-50% (w/w) to a first heating compression step in which the density of the hardwood is increased to a first predetermined level and the moisture content is reduced to approximately 4-8% (w/w),

releasing wood from said first compression step and coating and impregnating said compressing wood with a fatty acid,

optionally, when said wood is hardwood, subjecting said impregnating compressed wood to a second heated compression step in which the density of said compressed wood is increased to a second predetermined level and the moisture content is reduced to suit end product requirements, at as low as 2-4% (w/w) and in which said fatty acid is further impregnated into said compressed wood, and

releasing said wood from said second compression step and allowing said impregnated compressed wood to anneal while cooling to ambient temperature.

Claim 52 (new): The method as claimed in claim 51, wherein said hardwood is subjected to a preliminary drying step prior to said first compression step.

Claim 53 (new): The method as claimed in claim 51, wherein said first compression step is conducted at a pressure of from 50 to 114 kg/cm² according to wood species.

Claim 54 (new): The method as claimed in claim 51, wherein the temperature of said first compression step is within the range of 140°C to 185°C.

Claim 55 (new): The method as claimed in claim 51, wherein said softwood is subjected to a temperature of up to 200°C prior to said first compression step.

Claim 56 (new): The method as claimed in claim 51, wherein said compressed wood is impregnated by passing it through a heated bath only, or in combination with a vacuum pressure chamber.

Claim 57 (new): The method as claimed in claim 56, wherein said fatty acid is in a paraffin carrier.

Claim 58 (new): The method as claimed in claim 51, wherein said fatty acid is a member of the group consisting of stearic acid, palmitic acid and a combination thereof.

Claim 59 (new): The method as claimed in claim 51, wherein said second compression step is conducted at a temperature between 60°C and 140°C.

Claim 60 (new): The method as claimed in claim 52 wherein said wood is subjected to a preliminary drying step to reduce its moisture content prior to steam heating and before said first compression step.

Claim 61 (new): The method as claimed in claim 60, wherein said wood is subjected to an intermediate step of immersion in hot water or superheated steam.

Claim 62 (new): The method as claimed in claim 52, wherein said compressed wood from the said second compression step is subjected

to further processing.